



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,063	02/25/2004	Tomohisa Higuchi	249256US6X	8923
22850	7590	09/13/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			WALTER, CRAIG E	
			ART UNIT	PAPER NUMBER
			2188	
			NOTIFICATION DATE	DELIVERY MODE
			09/13/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

# Office Action Summary

Application No.

10/785,063

Applicant(s)

HIGUCHI, TOMOHISA

Examiner

Craig E. Walter

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-18 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2188

***Status of Claims***

1. Claims 1-10 and 12-18 are pending in the Application.

Claims 1, 9, 10, 12, 17, and 18 have been amended.

Claims 11 and 19 are cancelled.

Claims 1-3 and 5-10, and 12-18 are rejected.

Claim 4 is objected to.

***Response to Amendment***

2. Applicant's amendments and arguments filed on 12 July 2007 in response to the office action mailed on 16 April 2007 have been fully considered, but they are rendered moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 8-10, 12, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi (US Patent 5, 378,887) and in further view of Masaki et al. (US PG Publication 2002/0188852 A1), hereinafter Masaki.

As for claims 1, 9 and 10, Kobayashi teaches an information processing apparatus (Fig. 5, element 30), (method and medium) having embedded therein a

separate information recording medium (Fig. 5, elements 32, 36, 38 and 40), the information processing apparatus comprising:

communicating means for communicating data with said information recording medium (Fig. 5, element 32) that is independent of said communication means of the information processing apparatus (referring to Fig. 5, the data path connecting elements 32 to 34 and 34 to 36 (not labeled) comprise the communication means; the memory may be accessed (i.e. read) by the memory control section via the read area deciding section – col. 7, line 62 through col. 8, line 11);

detecting means for detecting any access to said information recording medium (Fig. 5, element 36 – the memory control section controls access to and from the memory, therefore it is capable of detecting when the memory is being accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means of the information processing apparatus or external access from an external apparatus external to the information processing apparatus (access can occur from a write operation via the external device (referring to Fig. 5, the external device communicates with the IC card via the non contact terminal (40), to the modulating and demodulating section (38), to the memory control section (36) – col. 7, line 63 through col. 8, line 17). Additionally, the access could be simply result from reading the memory via the read area deciding section - col. 7, line 63

through col. 8, line 11). Note the memory control section is capable of making a determination of where the access is coming from – more specifically, the read area deciding section is used to decide which area of the memory 32 should be accessed. In order for the system to function properly, the read area deciding section must compare the numbers recorded in each respective area in of the memory (either 321 or 322), and make a determination based on this information which area should be selected. This information is then sent to the memory control section - col. 8, lines 63 through col. 9, line 7. Kobayashi clearly sets forth the read area deciding section as accessing the memory sections to make this determination (to compare the numbers read from each respective section), therefore he does teach an "internal access" (i.e. accessing includes both writing to, and *reading from*, a memory). Kobayashi's memory control section clearly can determine if the memory access occurs from the external apparatus (the thrust of the invention is directed to preventing and allowing re-access from the external source), and clearly it can determine the occurrence of an internal access (i.e. the data coming from the read area deciding section is a result of internal access once it receives the critical information on the memory areas); and

access controlling means for controlling the external access from said external apparatus when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus (col. 2, line 64 through col. 3, line 11 – the system will

generate an inhibition signal to control access to the memory via the external device for a predetermined time. The control means can decide whether or not to permit access from the external device to the main circuit based on frequencies of access, by uses the information provided by the inhibition signal) - the memory control section can clearly control access to the memory from the external apparatus via the re-access circuitry, Kobayashi clearly teaches controlling the external access when it is determined that the access has occurred from the external apparatus (i.e. access cannot be controlled unless the external apparatus is first determined be accessing the memory). Additionally note, Kobayashi's system does not allow for the data read out of the memory areas to be written back to the memory (rather it is used as metadata to help control the data from the external apparatus), hence Kobayashi is controlling access from the external apparatus via the aid of the data which was accessed internally).

Though Kobayashi explicitly teaches an information recording medium (Fig. 5, element 32), and a memory, a control unit, and an antenna (Fig. 5, elements 321/322, 36, 38 and 40 respectively), he fails to specifically teach the information recording medium as comprising each of these elements.

Masaki however teaches an illegal access monitoring device which integrates multiple elements (i.e. memory, monitoring circuits, memory managers) unto a single integrated circuit card (Fig. 2, element 101) – paragraph 0080, all lines.

As for claims 12, 17 and 18, Kobayashi teaches an information processing apparatus (method, medium and program) having embedded therein a separate information recording medium, comprising:

communicating means for communicating data with said information recording medium (Fig. 5, element 32) that is independent of said communication means of the information processing apparatus (referring to Fig. 5, the data path connecting elements 32 to 34 and 34 to 36 comprise the communication means; the memory may be accessed (i.e. read) by the memory control section via the read area deciding section – col. 7, line 62 through col. 8, line 11);

detecting means for detecting access to said information recording medium (Fig. 5, element 36 – the memory control section controls access to and from the memory, therefore it is capable of detecting when the memory is being accessed – col. 7, line 63 through col. 8, line 11);

determining means for determining whether a result of detection by said detecting means indicates internal access by said communicating means of the information processing apparatus or external access from an external apparatus (access can occur from a write operation via the external device (referring to Fig. 5, the external device communicates with the IC card via the non contact terminal (40), to the modulating and demodulating section (38), to the memory control section (36) – col. 7, line 63 through col. 8, line 17). Additionally, the access could be simply result from reading the memory via the read area deciding

section - col. 7, line 63 through col. 8, line 11). Note the memory control section is capable of making a determination of where the access is coming from; and informing means for, when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus, notifying a user of the external access (once the circuit completes operation based on the access from the external device, an operation inhibition signal is generated to notify the system that a recent access has occurred, and the no additional access is to occur until the predetermined time elapses – col. 2, line 64 through col. 3, line 11).

Please refer to claim 1 for further explanation of Kobayashi's teachings with respect to these claim limitations.

Though Kobayashi explicitly teaches an information recording medium (Fig. 5, element 32), and a memory, a control unit, and an antenna (Fig. 5, elements 321/322, 36, 38 and 40 respectively), he fails to specifically teach the information recording medium as comprising each of these elements.

Masaki however teaches an illegal access monitoring device which integrates multiple elements (i.e. memory, monitoring circuits, memory managers) unto a single integrated circuit card (Fig. 2, element 101) – paragraph 0080, all lines.

As for claims 2 and 15, though Kobayashi teaches detecting access to his information processing apparatus, he fails to teach recording the internal or external access information as history information on a recording medium.



Masaki however teaches an illegal access monitoring device for an IC card, which is used to monitor access to the IC card (paragraph 0037, all lines). Note Masaki specifically refers to storing access information in the IC card (paragraph 0112, all lines).

As for claim 3, Kobayashi's system is designed such that the access controlling means refers to the inhibition signal, rather than stored access history information in order to control external access from the external device. Again Masaki teaches monitoring access to the card, and storing access information in said card, which may be referred to a later time to determine if access should be granted or denied based on the stored access information (see the rejection of claim 2 above).

It would have been obvious to one of ordinary skill in the art at the time of the invention for Kobayashi to further include Masaki's illegal access monitoring device for an IC card to his own non-contact IC card. By doing so, Kobayashi would benefit by increasing the security and integrity of data stored within the card by preventing unauthorized access to the memory, and further mitigating the threat of reverse engineering as taught by Masaki in paragraph 0036, all lines.

As for claim 5, Kobayashi teaches informing means for, when said determining means determines that the result of detection by said detecting means indicates the external access from said external apparatus, notifying the user of the external access (once the circuit completes operation based on the access from the external device, an operation inhibition signal is generated to notify the system that a recent access has

occurred, and the no additional access is to occur until the predetermined time elapses – col. 2, line 64 through col. 3, line 11).

As for claims 8 and 16, Kobayashi teaches the information recording medium as being a non contact type IC (Kobayashi's invention is directed towards controlling a non contact type IC card (see abstract)).

4. Claims 6, 7, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Kobayashi (US Patent 5, 378,887) and Masaki (US PG Publication 2002/0188852 A1) as applied to claims 5 and 9 above, and in further view of Hinker et al. (US Patent 6,351,845 B1), hereinafter Hinker.

As for claims 6, 7, 13 and 14, though the combined teachings of Kobayashi and Masaki disclose notifying external access to the memory, they fail to teach notifying the user of the system via a warning display, sound, light, or vibration. They further fail to teach changing the informing method based on access source as claimed by Applicant.

Hinker however teaches an apparatus for analyzing memory use in which the system visually notifies a user when particular types of memory access are occurring within the system (see abstract). More specifically, Hinker teaches the use of different colors to designate the specific type of memory access (i.e. red for a read operation, and green for a write operation) – col. 8, lines 33-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention for the combined teachings of Kobayashi and Masaki to further include Hinker's apparatus for analyzing memory use to his own non-contact IC card. By doing they would benefit by having a means of visually informing the user of his card as to

how frequently the memory is being accessed, and which access type is taking place. This in turn will help the user understand data dependencies within the memory as taught by Hinker in col. 3, lines 4-9. This information, can in turn help a user to understand how the memory is being accessed, in order to help reduce the number of accesses, hence improving the memory's efficiency as taught by Hinker in col. 1, line 20-32.

Note that since Kobayashi's system uses the read area deciding section (Fig. 5, element 34) to read data from the memory, and utilizes a path from elements 40, 38, 36 (Fig. 5) to access the memory (32) from the external device, a read and write operation would come from a different source, just as claimed by Applicant.

#### ***Allowable Subject Matter***

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Though Kobayashi in view of Masaki disclose all of the limitations of claim 3, they fail to further teach when the history information corresponding to said external apparatus is not retrieved, displaying a selection screen for allowing selection of permission or denial of the external access, wherein the recording

means records the history information on a basis of an operation of the selection screen by a user as recited by Applicant in this claim.

### ***Response to Arguments***

7. Applicant's arguments with respect to claim 1-3, 5-10 and 12-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tamai et al. (US Patent 7,031,946 B1) teach an information recording medium, noncontact IC tag, access device, access system, and method.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2188


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig E. Walter whose telephone number is (571) 272-8154. The examiner can normally be reached on 8:30a - 5:00p M-F.

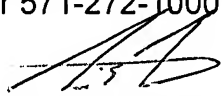
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Souh can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEW

  
HYUNG SOUH  
SUPERVISORY PATENT EXAMINER

9/07/07

  
Craig E Walter  
Examiner  
Art Unit 2188